

Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (previously presented) A nozzle configured to make injection molded components, comprising:
 - a nozzle body;
 - a melt channel running through the nozzle body configured to allow melt material flow;
 - a heater positioned within the nozzle body and adjacent one side of the melt channel; and
 - a thermally conductive device located inside the nozzle body, the thermally conductive device being configured to produce an even heat profile along an entire length of the melt channel.
2. (previously presented) The nozzle of claim 1, wherein the heater is integral with the thermally conductive device.
3. (previously presented) The nozzle of claim 1, further comprising a thermocouple.
4. (previously presented) The nozzle of claim 3, wherein the thermocouple is integral with the thermally conductive device.

5. (previously presented) The nozzle of claim 3, further comprising:

a control device configured to receive a signal from the thermocouple, wherein the heater is configured to be controlled via the control device based on the received signal from the thermocouple.

6. (previously presented) The nozzle of claim 3, wherein the thermally conductive device is located proximate one or more of the thermocouple and the heater.

7. (previously presented) The nozzle of claim 1, further comprising a plurality of melt channels.

8. (previously presented) The nozzle of claim 1, further comprising a plurality of heaters.

9. (previously presented) The nozzle of claim 1, further comprising a plurality of thermocouples.

10. (previously presented) The nozzle of claim 1, further comprising a plurality of thermally conductive devices.

11. (previously presented) The nozzle of claim 1, wherein the nozzle is a micro nozzle.

12. (previously presented) The nozzle of claim 1, wherein the nozzle is a flat micro nozzle.

13. (previously presented) The nozzle of claim 1, wherein the nozzle is thermal-gated.

14. (previously presented) The nozzle of claim 1, wherein the nozzle is valve gated.

15. (previously presented) The nozzle of claim 14, wherein a valve pin is inserted into a valve channel spaced from the melt channel.

16. (previously presented) The nozzle of claim 1, wherein the nozzle is edge gated.

17. (currently amended) The nozzle of claim 1, wherein the nozzle body is manufactured from at least one of tool steel, and an alloy comprised of carbon, nickel, cobalt, chromium, molybdenum and iron ~~AreMet 100 alloy, and AreMet 300 alloy~~.

18. (previously presented) The nozzle of claim 1, wherein the thermally conductive device is manufactured from at least one of copper, brass, beryllium, and aluminum.

19. (previously presented) The nozzle of claim 1, wherein the heater is at least one of a film heater, a coil heater, and a cartridge heater.

20. (previously presented) The nozzle of claim 1, wherein the nozzle body is asymmetrical with respect to a longitudinal axis of the nozzle channel.

21. (previously presented) The nozzle of claim 1, further comprising removable nozzle tip.

22. (previously presented) The nozzle of claim 1, further comprising a nozzle seal portion.

23. (currently amended) A nozzle configured to produce injection molded components, comprising:

- a nozzle body;
- a melt channel located inside the nozzle body;
- a heater located inside the nozzle body adjacent only one side of the melt channel, said heater having an uneven heat profile with respect to the melt channel; and
- a thermally conductive device located between the heater and the melt channel that produces an even heat profile along the melt channel.

24. (previously presented) The nozzle of claim 23, wherein the nozzle body comprises an asymmetrical nozzle body.

25. (previously presented) The nozzle of claim 23, wherein the nozzle comprises a flat nozzle.

26. (currently amended) An injection nozzle comprising:

a nozzle body made from a first material;

a melt channel located inside the nozzle body;

a heater located inside the nozzle body adjacent on and positioned entirely on one side of the melt channel; and

a thermally conductive device located between the heater and the melt channel,

the thermally conductive device being made of a second material which is more thermally conductive than the first material.

27. (previously presented) The nozzle of claim 26, wherein the nozzle body is asymmetrical.

28. (previously presented) The nozzle of claim 26, wherein the thermally conductive device is located along one side of the melt channel.

29. (previously presented) The nozzle of claim 26, wherein the nozzle comprises a flat nozzle.

30. (New) The nozzle of claim 23, further comprising at least one heater located within the nozzle body adjacent a second side of the melt channel.

31. (New) The nozzle of claim 23, wherein the nozzle body is made from a first material and the thermally conductive device is made of a second material that is more thermally conductive than the first material.

32. (New) The nozzle of claim 31, wherein the second material of the thermally conductive device is comprised of at least one of copper, brass, beryllium, and aluminum.

33. (New) The nozzle of claim 26, further comprising at least one heater located within the nozzle body adjacent a second side of the melt channel.

34. (New) The nozzle of claim 26, wherein the second material of the thermally conductive device is comprised of at least one of copper, brass, beryllium, and aluminum.